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TITLE : BATTERY

ABSTRACT : PROBLEM TO BE SOLVED: To provide a high-capacity battery which has good cyclic characteristics and ensures a high safety by winding a positive electrode sheet and a negative electrode sheet spirally to accomplish an electrode body, and using a negative electrode active material having a greater charging capacity than the positive electrode active material.

SOLUTION: An electrode body is formed by winding round a positive electrode sheet and a negative electrode sheet spirally, while lithium salt is used as electrolyte. In this battery, the negative electrode active material is given a charging capacity per unit weight as 3.0 times greater than the positive electrode active material. The positive electrode sheet should favorably be structured so that the active material quantity on the outside surface is 0.97-1.03 times per unit area of electricity collector as large as the active material quantity on the inside surface. It is also preferable that the active material quantity per unit area of electricity collector on the outside surface of the negative electrode sheet is greater than on the corresponding inside surface and that the ratio of coating amount ranges between 1.03 and 1.20. Further the material of the positive electrode should preferably contain transition metal compound(s), while the material of negative electrode should preferably contain an amorphous carbonaceous material and also carbon fibers.

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